MEMORANDUM

TO: Cecilia Tapia, Director, SUPR

FROM: James A. Johnson, OSC SUPR/ERNB

THRU: Dan Gravatt, RPM SUPR/MOKS

DATE: Friday, November 8, 2013

RE: Trip report

Site: Westlake Landfill Site
Address: 13570 St. Charles Rock Road
Bridgeton, MO 63044
CERCLIS ID: MOD079900932
SSID: 0714

On Sunday, October 27, 2013, at the request of the EPA R7 Remedial Project Manager (RPM) Dan Gravatt, On-scene Coordinator (OSC) James Johnson traveled to Bridgeton, Missouri to attend the Feezor Engineering (FEI) health, safety and radiological training and oversee the PRP proposed Gamma Cone Penetrometer Test (GCPT) radiological sampling operations at the Westlake Landfill Site. I arrived on site at 0700 hours on Monday, October 28, 2013, and discussed training, site operations and planned activities with Daniel Feezor, (owner Feezor Engineering, Inc FEI). FEI is overseeing the GCPT phase I (clearing, cleaning establishing the road system within OU-1, the radiologically impacted area (RIM) & phase II (the GCPT testing and core sampling phase).

A synopsis of the site and proposed actions:
A detailed subsurface investigation is proposed in Area 1 of Operable Unit 1 of the West Lake Landfill Superfund Site in order to identify the optimum location and obtain geotechnical data for a possible contingent isolation barrier immediately to the north of the Bridgeton Landfill - North Quarry Area. One contingency under consideration is a subsurface thermal barrier located between Bridgeton Landfill's waste mass and the RIM located within West Lake OU-1 Area 1. At the present time, Bridgeton Landfill is experiencing a Subsurface Smoldering Event (SSE) in its South Quarry Area. While the SSE is currently a significant distance from OU-1 Area 1, Bridgeton Landfill wishes to develop a response strategy to ensure that the SSE does not spread into the Area 1 RIM.

In the 1970's West Lake Landfill received contaminated waste, including soil mixed with leached barium sulfate residues containing traces of uranium, thorium and their long-lived daughter products. The presence of the radiologically impacted material (RIM)

resulted in the West Lake Landfill being designated as a Superfund site. The RIM is located in two areas at the site: Area 1, which is adjacent to the North Quarry Landfill and thus is pertinent to this investigation; and Area 2, which is located along the northern portion of the site. Area 2 is approximately 1,000 feet (at the closest) from the outer boundary of the North Quarry Area and is separated from it by a road and a closed demolition landfill. Collectively, these two areas have been designated as Operable Unit 1 for the Superfund investigation and remediation activities while the rest of the site was designated as Operable Unit 2.

There will be 69 GCPT locations, with the 10 additional sampling locations extending to the southern perimeter fence line, in addition to GCPT calibration locations. The existing conditions of Area 1 include woody overgrowth and trees. Paths will be developed to minimize the clearing, but to allow access to all the GCPT locations. In order to prevent any visible dust emissions, the field team will use vegetation shears on larger vegetation.

The paths will be guided by an onsite surveyor, and an onsite health physicist who will conduct an overland gamma scan. Survey meters will be used to survey selected portions of ground surface within and around Area 1. Once the path is cleared, a crew will deploy a non-woven geotextile underlayment, and then a rock aggregate (gravel) will be spread to advance gravel roads to each test location along the cleared alignments. This should greatly reduce the risk that soil contamination may be transmitted to the field crew, and minimize any rutting due to ingress and egress. Attempts will be made to disturb the soil as little as possible, if at all.

OSC oversight 10/29 – 11/09/2013:
There are two phases of work that R7 OSC's are tasked with oversight: the OU-1 RIM area prep and the Gamma Cone Penetrometer testing (GCPT) core sampling phase. I was on-site to monitor the initial vegetation clearing in preparation for the construction of the "main line alignment" sampling gravel pathways or OU-1 RIM prep work. This phase included bringing equipment to the site, construction of a storage area, graveling / paving roads into the OU-1 RIM area, brush hogging/vegetation clearing of the site and the establishment of a decontamination pad *{It is my understanding that FEI, at this point, is only conducting an engineering survey – there will be no isolation barrier construction or excavation in this phase. The purpose of the work is to survey an area between Bridgeton Sanitary Landfill and West Lake Landfill, at and below the ground's surface, using drilling and scanning equipment, to identify any radiologically-impacted material that may be present and ensure the area is suitable for future construction of the isolation barrier}.*

To avoid unnecessary disturbance of the landfill's surface, I observed FEI building a system of temporary roads or paths across a portion of the RIM surface, on which the survey equipment (GCPT vehicle) will be able to travel. During the clearing phase the equipment and techniques being used for this survey were expected to generate only minimal amounts of dust. EPA staff was on site monitoring all work to ensure that any dust generated was suppressed by means of wetting of surfaces with water.

During this phase, I did not observe any visible emissions or fugitive dust leaving the site. I observed approximately 75 – 95% of the work being conducted during this time period. This work included the main alignment pathway, development of pathways #1-#12, the "finger pathways" off of the main alignment, hauling, excavating, personal & equipment decontamination procedures & protocols, daily work assignments, and attended daily site safety briefings. During this time period, the site experienced one half day of work in the morning and were rained out all afternoon (10/29/13), two outs (10/31 & 11/6/2013) were no work was undertaken and one rain delay (11/5/2013) which work commenced all day but effort were hampered due to wet weather conditions.

The Missouri Department of Natural Resources (MDNR) staff was occasionally on site (Shaun Muencks & Rita Alexander) and continued to monitor the air for gamma radiation and other emissions throughout this initial phase. Also, all personnel (contractor, State, Federal, & local) working on the project were trained in appropriate worker health and safety protocols for the site, and followed their respective written Health and Safety Plans. I observed FEI conducting daily site safety, radiological work permit procedures and scope of work briefings and documentation.

To my knowledge, the site was not visited by the general public or any media outlets during this time period.

All site photographs, drawings, records, and / or other actions taken that document EPA OSC oversight or PRP actions can be found at: www.epaosc.org/westlakeoversightinfo.